



THE FORENSIC PANEL

TEL: 212 535 9286 FAX: 212 535 3259 MICHAEL WELNER, M.D., CHAIRMAN

October 29, 2021

James Loonam, Esq.
Jones Day
250 Vesey Street
New York, NY 10281

Re: U.S. v. Robert T. Brockman

Dear Mr. Loonam,

Pursuant to your request, I have conducted a forensic review of evidence pertinent to the neurology diagnosis and functional capabilities of the above defendant. Robert Brockman, 80, is under federal indictment for 39 counts relating to a complex series of actions and transactions involving a variety of corporate entities and several countries and including people he is alleged to have directed in various financial activities that prosecutors charge evaded taxes or were otherwise illegal.

Earlier this year, I reviewed a considerable quantity of records and collateral source materials as part of a multi-specialist, multispecialty study. Other colleagues of mine in The Forensic Panel who had primary examiner roles were Marc Agronin, M.D., a geriatric psychiatrist; Thomas Guilmette, a neuropsychologist; and Christopher Whitlow, M.D., Ph.D., a neuroradiologist. The work involved my peer oversight of the above colleagues from the reference point of neurology, and separately, my examination of the diagnostic and functional issues specific to my discipline.

The above specialists and myself each filed reports of our findings in accordance with the court deadline of August 6, 2021. In my August 6, 2021 report, I concluded that Mr. Brockman has dementia, most likely due to Parkinson's Disease but also with the possibility of co-occurring Alzheimer's Disease.

Since the filing of that report, more records have been provided for my review. Moreover, Mr. Brockman was hospitalized in subsequent weeks, and now presents a mental status that I cautioned could occur in the August 6 report. Additional diagnostic studies have since been performed - and examinations by others - and made available for my review. I also conducted an in-person neurological evaluation of Mr. Brockman on October 17, 2021.

On the basis of this additional evidence, and the collateral input of an interview with Mr. Brockman's wife, I am supplementing my report of August 6 to address the following questions:

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 2 of 13

- 1) *What diagnoses are reflected in the recent history and other testing data? From the perspective of neurology, what data have you relied upon to inform your conclusions?*
- 2) *Is Mr. Brockman able to provide relevant, requested facts, dates, and specifics?*
- 3) *Does Mr. Brockman reflect the mental stamina needed for a courtroom trial on the charges he faces? Why or why not?*

This narrative is an update to my August 6 report, made possible with the nature and quality and recency of the information I have now reviewed in total. Before reading this report, a review of the August 6 report is necessary in order to properly account for my findings and how I arrived at these conclusions. Much of that analysis that has not changed is not being repeated here, but the totality of that analysis remains as my opinion to this day. This report supplements the first report as its updated companion.

MOST RECENTLY REVIEWED SOURCES OF INFORMATION

- 1) Sleep study, August 12-13, 2021
- 2) FDG PET scan report, August 24, 2021
- 3) EEG report, September 2, 2021
- 4) Medical records from Mr. Brockman, dates ranging from 1997-2014
- 5) Dr. Denney's interview notes with Kathy Keneally on June 14, 2021 and Pete Romatowski on June 15, 2021
- 6) Dr. Darby's interview notes with Dorothy Brockman
- 7) Medical records from Baylor College of Medicine for Drs. Pool and Smith through to August 18, 2021
- 8) Houston Methodist hospitalization records, September 15-18, 2021
- 9) Reports of Maria Ponisio, M.D. on neuroimaging, September 1, 2 and 5, 2021
- 10) Video recording and transcript of Mr. Brockman's interview with Thomas Guilmette, PhD., October 2, 2021
- 11) Video recording and transcript of Mr. Brockman's interview with Marc Agronin, MD, October 3, 2021
- 12) Thomas Guilmette, Ph.D supplemental report, October 29, 2021
- 13) Marc Agronin, MD supplemental report, October 29, 2021
- 14) Interview with Dorothy Brockman, October 16, 2021
- 15) Examination of Robert Brockman, October 17, 2021
- 16) Video recording and transcript of Drs. Denney and Dietz's examination, October 20, 2021
- 17) Medical records of Dr. Lai's examination, October 7, 2021
- 18) Dr. Lai's interview with government prosecutors, September 8, 2021
- 19) Christopher Whitlow, MD. supplemental report, October 29, 2021

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 3 of 13

COLLATERAL SOURCE INPUT

Frank Gutierrez is a personal aide and caregiver to Mr. Brockman, who interacts with him on a daily basis. He indicates that Mr. Brockman requires help for all activities of daily living and that over the last year he has become much more fragile. Mr. Brockman requires assistance with selection of clothing and proper dressing, going to the toilet, safe ambulation, and preparing any food.

Mr. Gutierrez stated that Mr. Brockman is unsteady and will fall easily. As a result, the examinee has had several recent falls notably in late August and another fall in late September when Mr. Brockman suffered a minor head injury. Occasionally, according to Mr. Gutierrez, Mr. Brockman is disoriented in his own home. For example, he occasionally has difficulty in finding his way to the bathroom or from room to room.

I interviewed Mrs. Dorothy Brockman virtually on October 16. She described a picture similar to that portrayed by Mr. Gutierrez. Mrs. Brockman reported that memory difficulties and lapses in judgement were apparent since late 2018 and that in 2019, she needed to take the car keys away from Mr. Brockman, as he could no longer safely drive.

Mrs. Brockman added that in 2019 she and her son Robert took over the family finances and paying bills, as Mr. Brockman was no longer able to do this. She stated that her husband's cognitive abilities have been progressively declining, with faster progression over the last year, and with acceleration of the decline since his last hospitalization with urosepsis.

Mr. Brockman does recognize both his wife and their son, she noted. However, he sometimes does not recognize or remember the name of his grandson, James.

In order to gain more exact accounting of Mr. Brockman's abilities, I queried Mrs. Brockman about items from the Activities of Daily Living Inventory. This is a measure widely used in clinical trials of potential Alzheimer's disease treatments¹, which assesses the degree of impairment of typical activities of daily living. He scored 9/78, indicating a severe impairment of all activities of daily living. Mrs. Brockman indicated, specifically, that her husband is not able to use a knife, and that she has to cut larger pieces of food for him. He is dependent on help for all food preparation and is unable to use household appliances. He is incontinent of urine and must wear protective diapers, particularly at night. He needs help with all grooming. He is not able to use a telephone; he can only speak into the phone when put on the line. When watching television, Mr. Brockman typically does not comprehend what is happening and has no memory of what was watched, within minutes.

¹ Devanand D, Andrews HA, Kreisl WC, Razlighi Q, Gershon A, Stern Y, Mintz A, Wisniewski T, Acosta E, Bell KL, Pelton GH, Deliyannides D, Prasad K, Huey ED, **Valacyclovir Treatment of Alzheimer's Disease (VALAD) Trial Protocol for a randomized, double-blind, placebo-controlled, treatment trial.** BMJ Open, Feb 6;10(2).

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 4 of 13

More recent Neuropsychological Testing: Thomas Guilmette, Ph.D. conducted repeat neuropsychological testing on Mr. Brockman on October 2, 2021. Briefly summarized, on a global measure of neuropsychological function Mr. Brockman's results continue to indicate significant impairments in multiple cognitive domains consistent with dementia. Mr. Brockman's testing also continues to show significant difficulties across measures of attention, mental processing speed, and working memory. He demonstrated substantial inattention and difficulty with focus. Fatigue was a significant factor impeding Mr. Brockman's performance. However, his language function continues to be a relative strength.

Further Neurological Testing: In August 2021, the government requested that Mr. Brockman undergo an EEG and that his brain FDG PET Scan be repeated. The EEG was obtained on September 2, 2021, at Houston Methodist Hospital. It showed diffuse slowing of brain waves and was interpreted by Dr. Brandy Ma of Houston Methodist Hospital to indicate "global cerebral dysfunction." This is a non-specific EEG finding indicating diffuse brain dysfunction, without a specific localization. Such non-specific diffuse slowing can be seen in the setting of Lewy body pathology, such as dementia with Lewy bodies and Parkinson's disease with dementia.² A repeat EEG on September 17, 2021, conducted at Houston Methodist Hospital during Mr. Brockman's most recent hospitalization corroborated these findings.

A repeat FDG PET scan was conducted on August 24, 2021 at Houston Methodist Hospital. Interpreted by radiologist Dr. Ronald Fisher, results demonstrate "Mildly reduced uptake in the posterior temporal lobes and bilaterally in the parietal lobes. Slightly reduced uptake in the frontal lobes," suggestive of a neurodegenerative disease such as Alzheimer's disease, and/or dementia with Lewy bodies or Parkinson's disease with dementia.

Government retained neuroradiologist, Dr. Maria Ponisio, subsequently reviewed this data and opined that "the described pattern of hypometabolism can be seen in early Alzheimer's dementia in the correct clinical setting. When compared to prior examination, there is a mildly progressive decrease of metabolic activity in the compromised brain areas. No significant decreased metabolic activity in the frontal and occipital lobes to suggest frontotemporal dementia spectrum or Lewy body dementia."

These FDG PET findings are even more definitive for a diagnosis of Alzheimer's disease being at least one of the diagnoses when taken in conjunction with the findings of the

² van der Zande JJ, Gouw AA, van Steenoven I, Scheltens P, Stam CJ, Lemstra AW. **EEG Characteristics of Dementia With Lewy Bodies, Alzheimer's Disease and Mixed Pathology.** Front Aging Neurosci. 2018;10:190; Peraza LR, Cromarty R, Kobeleva X, Firbank MJ, Killen A, Graziadio S, Thomas AJ, O'Brien JT, Taylor JP. **Electroencephalographic derived network differences in Lewy body dementia compared to Alzheimer's disease patients.** Sci Rep. 2018;8(1):4637.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 5 of 13

amyloid PET/CT scan done July 28, 2021, which was a positive study, indicating moderate to frequent beta-amyloid neuritic plaques.

NEUROLOGY EXAMINATION

I evaluated Mr. Brockman on the morning of October 17, 2021 in a conference room at the Houston office of Jones Day. He was escorted by his personal aide and caregiver Mr. Frank Gutierrez, who needed to hold Mr. Brockman's arm and assist him with sitting in a chair. Mr. Gutierrez had to position the chair, and with a two-arm assist, allowed Mr. Brockman to fall back into the chair.

Mr. Brockman appeared a frail man, who is clearly unsteady, with a slow, shuffling gait with a mild bilateral hand pill-rolling tremor. After assisting the examinee with sitting in a chair, Mr. Gutierrez gave Mr. Brockman morning medications. Mr. Brockman appeared neatly groomed, calm, verbal and co-operative. He had a masked face, without significant facial expression.

Mr. Brockman was a poor historian. He showed evidence of confabulation; i.e. he gave false answers to some questions to make up significant gaps in memory. He could not state what his medical diagnoses are. He was not able to state what any of his medications are. He only indicated that he took a lot of different pills:

DR. WISNIEWSKI: Okay. You take a number of medications, and I saw Frank giving you some. What sort of medicines do you take, sir?

MR. BROCKMAN: Realistically, it's whatever they put in front of me.

DR. WISNIEWSKI: Okay. But you're not aware of what the pills are, their names.

MR. BROCKMAN: No.

He was not able to give basic personal information such as his address, or his telephone number, and incorrectly related that he had moved in over the summer when in fact it was months earlier, showing evidence of confabulation:

DR. WISNIEWSKI: Do you know the address where you're living now?

MR. BROCKMAN: At this very moment, I

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 6 of 13

don't.

DR. WISNIEWSKI: No. Okay. How long have you lived there, sir?

MR. BROCKMAN: Probably since the first part of summer.

He was unaware of the duration of medical conditions. He could not give accurate information as to when his hospitalizations were.

DR. WISNIEWSKI: Okay. So you do have some medical problems. Are you aware of your various diagnoses?

MR. BROCKMAN: I would say, yes, I'll probably be unable to remember every detail.

DR. WISNIEWSKI: Okay. Okay.

MR. BROCKMAN: But I'm –

DR. WISNIEWSKI: So what conditions do you have, sir, that you're aware of?

MR. BROCKMAN: Well, right now, I'm -- I'm recovering from sepsis.

DR. WISNIEWSKI: Right. Right. You were admitted to the hospital.

MR. BROCKMAN: Yeah.

DR. WISNIEWSKI: Yeah.

MR. BROCKMAN: And I -- I was -- that occurrence was a great surprise to me, but you know, fortunately, I think it was caught in time.

DR. WISNIEWSKI: Okay. How long ago was that, sir?

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 7 of 13

MR. BROCKMAN: Probably a month or six weeks. I -- you know, one of the things that happened was announced that my mental processes and memory, whatever, just kind of (makes sound).

DR. WISNIEWSKI: Oh, went downhill.

MR. BROCKMAN: Yeah. Very, very rapidly.

DR. WISNIEWSKI: Okay. And for how long have you been having problems with your memory?

MR. BROCKMAN: I think at least a year.

He acknowledged some occasional depression.

Neurologic Examination:

A positive Myerson's sign (or glabellar tap) was noted.

Frontal Release signs: left palmomental and grasp reflexes were noted.

He was alert and oriented to his name and where he was located; he was not able to state the year, the month, day of the week or the date.

Cranial Nerves:

CN II: Visual fields intact to confrontation. Pupils were equal, round and reactive to light and accommodation.

CN III, IV, VI: Extraocular muscles were intact.

CN V: Facial sensation is symmetric. Muscles of mastication appear normal and symmetric.

CN VII: Facial musculature was symmetric.

CN VIII: Hearing was reduced bilaterally with worse hearing on the right. Weber's testing localized to the left. Rinne testing showed air conduction was greater than bone conduction bilaterally.

CN IX, X: The palate raised symmetrically and the uvula is midline.

CN XI: Sternocleidomastoid 5/5 and trapezius 5/5 bilaterally.

CN XII: The tongue was midline.

Motor testing was 5/5 throughout, bilateral cogwheel rigidity was noted at the wrists.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 8 of 13

Sensory testing was reduced to light touch up to the mid-calves bilaterally, vibration was reduced at the toes and ankles. Proprioception was greatly reduced at the toes and slightly at the ankles.

DTR	R	L
	\2+	2+/ 2+ __ __/2+
	2+_ _2+	
	+ /	\ +
	/	\
	0	0

Toes down-going

Co-ordination: slight dysmetria was noted on finger to nose testing. Finger to nose testing showed evidence of motor perseveration with Mr. Brockman repeatedly striking my index finger, instead of smoothly moving from finger to nose.

Rapid alternating movements were slow and regular, slightly worse on the left.

Gait: slow, unsteady and shuffling, with a reduced arm swing. He was unable to do tandem walking.

A positive Romberg sign was noted.

This neurological examination is notable for all the cardinal signs of Parkinson's disease, namely rigidity, bradykinesia, resting tremor and postural instability. In addition, the frontal release signs and motor perseveration point to frontal lobe dysfunction. Furthermore, there is evidence of a significant peripheral neuropathy, with sensory loss in the legs and a resulting positive Romberg sign.

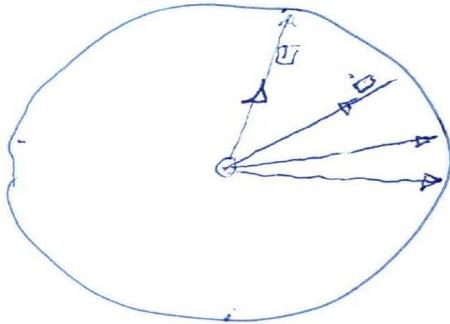
On the **Mini Mental State Examination (MMSE)**, Mr. Brockman scored 17/30, in the moderate dementia range (10-18 points). The finding on the MMSE from my examination is consistent with the Montreal Cognitive Assessment (MoCA) done by Dr. Agronin on October 3, 2021, when he scored 14/30 (10-17 points). This testing is also consistent with the MoCA performed by Mr. Brockman's neurologist at the Houston Methodist Neurological Institute (Dr. Lai) conducted on October 7, 2021, when he scored 13/30, representing a marked decline from his MoCA score of 20/30 in January 2020. A MoCA score of 20/30 is in the early dementia range, while the more recent score of 13/30 is in the moderate dementia stage, indicative of a much more significant cognitive impairment.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

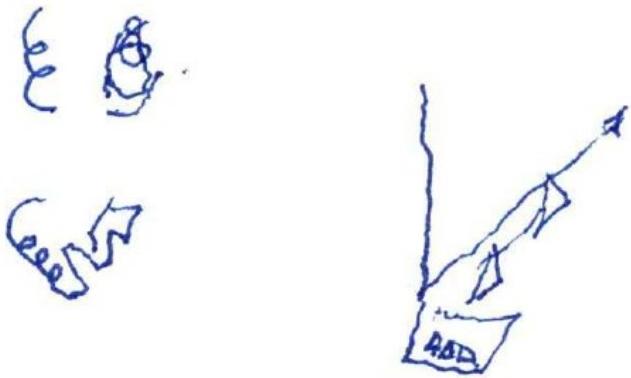
Page 9 of 13

My Clinical Dementia Rating (CDR) of Mr. Brockman was a 2/3, also consistent with moderate dementia. The CDR is a standard measure used to assess the severity of dementia.³ A rating of 2 on this scale indicates moderate dementia.

The clock-drawing testing showed marked abnormality, indicating evidence of marked visuospatial abnormalities.



On testing with a Luria's loop, Mr. Brockman was not able to copy the loop accurately (seen in the top left corner in the figure below) and first added another loop (seen below the original loop). Next, he drew a series of overlapping loops (seen to the right of the original loop). He then returned to trying to draw the clock, (seen on the right-hand side in the figure below). This performance showed clear evidence of motor perseveration.



³ Morris JC, Ernesto C, Schafer K, Coats M, Leon S, Sano M, Thal LJ, Woodbury P. **Clinical dementia rating training and reliability in multicenter studies: the Alzheimer's Disease Cooperative Study experience.** Neurology. 1997;48(6):1508-10.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 10 of 13

FORENSIC NEUROLOGY ASSESSMENT

- 1) What diagnoses are reflected in the recent history and other testing data? From the perspective of neurology, what data have you relied upon to inform your conclusions?*

The principal diagnoses are Parkinson's disease dementia (with associated depression) and co-occurring Alzheimer's disease. Other diagnoses obtained from a review of the medical records include: prior hospitalizations for separate episodes of delirium from a medical condition (urosepsis), apathy, insomnia with obstructive sleep apnea and possible REM sleep behavior disorder.

Mr. Brockman's neurological examinations have consistently shown all the signs of Parkinson's disease. These signs were present in my own examination as well. This was definitively confirmed by neuroimaging showing cerebral dopamine deficiency.

In addition, Mr. Brockman's repeated cognitive assessments demonstrate clear evidence of dementia. The diagnosis of Parkinson's Disease Dementia (PDD) is included in all the medical notes by Mr. Brockman's neurologists, over the last two years, including by Dr. Eugene Lai from October 7, 2021.

It is clear that Mr. Brockman's cognitive dysfunction and functional impairments in his day-to-day activities go far beyond what is considered mild cognitive impairment (MCI) due to Parkinson's disease (PD). As recently reviewed in Nature Reviews:

"PD-MCI is a gradual decline in cognitive ability reported by either a patient with PD or an informant or observed by the clinician, associated with cognitive deficits on either formal neuropsychological testing or a scale of global cognitive abilities. Subtle difficulties on complex functional tasks may be present and, based on the number of affected cognitive domains, PD-MCI can be classified as single or multiple domain."

PDD is defined as cognitive impairment in a patient with PD with deficits in at least two of four cognitive domains (executive abilities, attention, visuospatial abilities and memory) that are severe enough to significantly affect normal functioning beyond impairment caused by disease-related motor and autonomic symptoms. PDD can be denoted as mild (mild effect on daily functioning), moderate and severe (inability for independent living) dementia."⁴

⁴ Aarsland D, Batzu L, Halliday GM, Geurtsen GJ, Ballard C, Ray Chaudhuri K, Weintraub D. **Parkinson disease-associated cognitive impairment**. Nat Rev Dis Primers. 2021;7(1):47.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 11 of 13

Mr. Brockman has deficits in all four cognitive domains. Moreover, Mr. Brockman's cognitive assessments by MoCA, MMSE and CDR all fall into the moderate dementia range. Hence, Mr. Brockman's dementia symptoms not only go beyond mild cognitive impairment, but also beyond early dementia to the point of moderate dementia, when there is much more severe functional and cognitive impairment.

There is also definitive evidence by neuroimaging (that is highly consistent with cognitive testing) of coexisting Alzheimer's disease (AD) dementia. Dementia is often associated with multiple pathologies, with co-occurring AD pathology and dementia from PDD being one of the most common combinations.⁵

Mr. Brockman's neuroimaging has revealed both a definitely positive amyloid scan indicating significant neuritic plaques in his brain, as well as a pattern of metabolic impairment on FDG-PET, a definitive indication of the presence of Alzheimer's disease (AD). A 2021 study looked at the amyloid PET scans and the FDG PET scans of 101 individuals which were then compared to autopsy findings. This study reported nearly 100% detection of AD when both the amyloid PET and FDG PET scans were positive and in agreement with one another.

"In summary, both amyloid and FDG PET showed high accuracy in detecting AD pathology, although PIB had higher sensitivity and negative predictive value, particularly in early disease stages. PIB and FDG performed comparably in identifying AD as the primary etiologic pathology underlying clinical impairment. When PIB and FDG were congruent, sensitivity, specificity, and total accuracy approached 100%."⁶

These findings, coupled with his progressive neurocognitive impairment, suggest the very high degree of probability that Mr. Brockman is suffering from co-occurring AD with PDD.

⁵ Lesman-Segev OH, La Joie R, Iaccarino L, Lobach I, Rosen HJ, Seo SW, Janabi M, Baker SL, Edwards L, Pham J, Olichney J, Boxer A, Huang E, Gorno-Tempini M, DeCarli C, Hepker M, Hwang JL, Miller BL, Spina S, Grinberg LT, Seeley WW, Jagust WJ, Rabinovici GD. **Diagnostic Accuracy of Amyloid versus (18) F-Fluorodeoxyglucose Positron Emission Tomography in Autopsy-Confirmed Dementia.** Ann Neurol. 2021;89(2):389-401; Boyle PA, Yu L, Leurgans SE, Wilson RS, Brookmeyer R, Schneider JA, Bennett DA. **Attributable risk of Alzheimer's dementia attributed to age-related neuropathologies.** Ann Neurol. 2019;85(1):114-24; Boyle PA, Wang T, Yu L, Wilson RS, Dawe R, Arfanakis K, Schneider JA, Bennett DA. **To what degree is late life cognitive decline driven by age-related neuropathologies?** Brain. 2021;144(7):2166-75.

⁶ Lesman-Segev OH, La Joie R, Iaccarino L, Lobach I, Rosen HJ, Seo SW, Janabi M, Baker SL, Edwards L, Pham J, Olichney J, Boxer A, Huang E, Gorno-Tempini M, DeCarli C, Hepker M, Hwang JL, Miller BL, Spina S, Grinberg LT, Seeley WW, Jagust WJ, Rabinovici GD. **Diagnostic Accuracy of Amyloid versus (18) F-Fluorodeoxyglucose Positron Emission Tomography in Autopsy-Confirmed Dementia.** Ann Neurol. 2021;89(2):389-401.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 12 of 13

2) Is Mr. Brockman able to provide relevant, requested facts, dates, and specifics?

In my own examination of Mr. Brockman, as well as those of multiple other examiners, including that of Drs. Agronin and Guilmette, Mr. Brockman has very little ability to account for, and offer insight into, his medical conditions, his current medications and recent events.

Repeated examinations have shown evidence of a permanent, progressive and irreversible cognitive impairment that is currently in the moderately severe stage, with very significant impairments of all activities of daily living.

As such, it is not possible for Mr. Brockman to provide any accurate information regarding relevant, requested facts, dates or specifics. Mr. Brockman's condition will only worsen with time, as is the invariable course with all neurodegenerative disorders such as PDD and AD; this decline is typically faster with the co-occurrence of these two pathologies.⁷

Mr. Brockman's irreversible cognitive decline has been accelerated over the last year by his multiple (three) hospitalizations. Studies have shown:

“Older persons with more hospitalizations experienced faster rates of cognitive decline, and this association was more pronounced in persons with more tau tangle density and with neocortical Lewy body pathologies.”⁸

Mr. Brockman has both Lewy body pathology and tau pathology given his concomitant PDD and AD pathologies, with three hospital admissions over the last year, associated with a delirium. The combination of these pathologies and the hospitalizations accompanied by delirium have produced a more precipitous decline in his cognitive function during 2021. Each hospitalization associated with delirium can cause irreversible

⁷ Aarsland D, Batzu L, Halliday GM, Geurtsen GJ, Ballard C, Ray Chaudhuri K, Weintraub D. **Parkinson disease-associated cognitive impairment**. Nat Rev Dis Primers. 2021;7(1):47; Nelson PT, Alafuzoff I, Bigio EH, Bouras C, Braak H, Cairns N, Davies P, Tredici KD, Duyckaerts C, Frosch MP, Hof PR, Hulette C, Hyman BT, Iwatsubo T, Jellinger KA, Jicha GA, Kovari E, Kukull WA, Leverenz JB, Love S, Mackenzie IR, Mann DM, Masliah E, McKee A, Montine TJ, Morris JC, Schneider JA, Sonnen JA, Thal DR, Trojanowski JQ, Troncoso JC, Wisniewski T, Woltjer RL, Beach TG. **Correlation of Alzheimer's disease neuropathologic changes with cognitive status: a review of the literature**. JNEN. 2012;71:362-81; Scheltens P, De Strooper B, Kivipelto M, Holstege H, Chetelat G, Teunissen CE, Cummings J, van der Flier WM. **Alzheimer's disease**. Lancet. 2021. 4; Armstrong MJ. **Lewy Body Dementias. Continuum** (Minneapolis). 2019;25(1):128-46.

⁸ James BD, Wilson RS, Capuano AW, Boyle PA, Shah RC, Lamar M, Ely EW, Bennett DA, Schneider JA. **Hospitalization, Alzheimer's Disease and Related Neuropathologies, and Cognitive Decline**. Ann Neurol. 2019;86(6):844-52.

Re: U.S. v. Robert T. Brockman
The Forensic Panel – Thomas Wisniewski, M.D.
October 29, 2021

Page 13 of 13

brain damage, hastening cognitive decline. Delirium is consistently associated with an increased mortality rate across all non-surgical populations.⁹

3) Does Mr. Brockman reflect the mental and physical stamina needed for a courtroom trial on the charges he faces? Why or why not?

Mr. Brockman is frail and has poor motor function that is a result of his age and long-standing, well-documented Parkinson's disease. He has suffered multiple recent hospitalizations and falls, as a result of this PD associated frailty and incoordination. In addition, he has significant cognitive deficits from a likely combination of PDD and AD pathologies that greatly reduce any mental stamina. These cognitive deficits would severely limit his ability to interact with his attorneys to any substantive, sustained degree, or to participate meaningfully in a courtroom trial.



Thomas Wisniewski, M.D.
Director, Pearl I. Barlow Center for Memory Evaluation and Treatment;
Director, Alzheimer's Disease Center;
Director, Division of Cognitive Neurology;
Associate Chair for Research, Department of Neurology;
Professor of Neurology, Pathology, and Psychiatry, New York University School of Medicine

⁹ Inouye, Sharon K., Rudi GJ Westendorp, and Jane S. Saczynski. **Delirium in elderly people.** *The Lancet* 383.9920 (2014): 911-922.